

AMENDMENTS TO THE CLAIMS

Please amend claims as set forth below:

1-123. (Cancelled).

124. **(Currently amended)** A method for fabricating an orthopedic implant prosthesis bearing, comprising the steps of:

pre-annealing an ~~polyethylene~~ **ultrahigh molecular weight polyethylene (UHMWPE)** preform at a temperature greater than ambient temperature and less than the decomposition temperature of the ~~polyethylene~~ **UHMWPE** for a period of time greater than 30 minutes;

irradiating the ~~polyethylene~~ **UHMWPE** preform, thereby crosslinking the ~~polyethylene~~ **UHMWPE** preform; and

quenching residual free radicals in the ~~polyethylene~~ **UHMWPE** preform.

125. **(Currently amended)** The method of claim 124, further comprising the steps of:

cooling the preform after the quenching step to a temperature below the melting temperature of the ~~polyethylene~~ **UHMWPE**; and

forming the preform into a prosthetic bearing.

126. (Previously presented) A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

pre-annealing an ultrahigh molecular weight polyethylene preform;

irradiating the ultrahigh molecular weight polyethylene preform, thereby crosslinking the ultrahigh molecular weight polyethylene preform;

quenching residual free radicals in the ultrahigh molecular weight polyethylene preform subsequent to the irradiating step; and

forming the ultrahigh molecular weight polyethylene preform into a prosthetic bearing.

127. **(Currently amended)** A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

pre-annealing an ~~polyethylene~~ ultrahigh molecular weight polyethylene (UHMWPE) preform;

irradiating the ~~polyethylene~~ UHMWPE preform, thereby crosslinking the ~~polyethylene~~ UHMWPE preform;

quenching residual free radicals in the ~~polyethylene~~ UHMWPE preform subsequent to the irradiating step; and

forming the ~~polyethylene~~ UHMWPE preform into a prosthetic bearing.

128. (Withdrawn) A method for fabricating an orthopedic implant prosthesis bearing, comprising the steps of:

melting a polyethylene preform for a period of time greater than about 30 minutes;

irradiating the polyethylene preform to crosslink the polyethylene preform; and
quenching residual free radicals in the polyethylene preform.

129. (Withdrawn) The method of claim 128, further comprising the steps of:

cooling the preform after the quenching step to a temperature below the melting temperature of the polyethylene; and

forming the preform into a prosthetic bearing.

130. (Withdrawn) A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

melting an ultrahigh molecular weight polyethylene preform;

irradiating the ultrahigh molecular weight polyethylene preform to crosslink the ultrahigh molecular weight polyethylene preform;

quenching residual free radicals in the ultrahigh molecular weight polyethylene preform subsequent to the irradiating step; and

forming the ultrahigh molecular weight polyethylene preform into a prosthetic bearing.

131. (Withdrawn) A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

melting a polyethylene preform;

irradiating the polyethylene preform to crosslink the polyethylene preform;

quenching residual free radicals in the polyethylene preform after an irradiation;

and

forming the polyethylene preform into a prosthetic bearing.

132. (Withdrawn) The method according to claim 128, wherein the polyethylene is ultrahigh molecular weight polyethylene.

133. (Withdrawn) A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

irradiating a polyethylene preform that has been melted, thereby crosslinking the polyethylene

quenching residual free radicals in the polyethylene preform after an irradiation;

and

forming the polyethylene preform into a prosthetic bearing.

134. (Withdrawn) The method according to claim 133, wherein the polyethylene is ultrahigh molecular weight polyethylene.